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GLOSSARY OF TERMS FOR ANIMAL FEEDS AND FEEDINGSTUFFS

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GLOSSARY OF TERMS FOR ANIMAL FEEDS AND FEEDINGSTUFFS

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GLOSSARY OF TERMS FOR ANIMAL FEEDS AND FEEDINGSTUFFS

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 15 December 1980, after the draft finalized by the Animal Feeds Sectional Committee had been approved by the Agricultural and Food Products Division Council.

0.2 In the field of animal feeds manufacturing industry a large number of feedingstuffs (ingredients) are utilized, which may be by-products of other industries and also subjected to certain processing before utilization. It has been observed that different names are attributed to the same feedingstuff in different parts of the country resulting in confusion and misunderstanding amongst different interests. Therefore, with a view to familiarizing all interests with correct terms, this standard is being issued. It is expected that this standard when issued would help in removing any ambiguities and facilitate understanding and adoption of the correct terms.

1. SCOPE

1.1 This standard lists the terms and definitions of various animal feeds and feedingstuffs.

2. TERMINOLOGY

2.1 Additive — An ingredient or combination of ingredients added to the basic feed mix or parts thereof to fulfil a specific need. Usually used in micro quantities and requires careful handling and mixing.

2.2 Alfalfa (*Lucerne*) Leaf Meal — The dried ground product consisting chiefly of leaves separated from alfalfa (*Lucerne*) plant. It shall be reasonably free from other crop plants and weeds and shall contain not less than 20 percent crude protein and not more than 18 percent of crude fibre.

2.3 Alfalfa (*Lucerne*) Meal — Consists of dry and finely ground aerial portion of the alfalfa (*lucerne*) plant from which leaves have been separated.

2.4 Alfalfa (*Lucerne*) Stem Meal — The ground meal obtained from drying and grinding the aerial portion of the alfalfa (*lucerne*) plant, reasonably free from other crop plants and weeds.

2.5 Antibiotics — A class of drug. These are usually synthesized by a living micro-organism and in proper concentration inhibit the growth of other micro-organisms.

2.6 Balanced — A term that may be applied to a diet, ration, or feed having all known required nutrients in proper amount and proportion based upon recommendations of recognized authorities in the field of animal nutrition for a given set of physiological requirements of animals. The species for which it is intended and the functions such as maintenance or maintenance and production (growth, foetus, fat, milk, eggs, wool, feathers) or work shall be specified.

2.7 Barley Feed — The entire by-product resulting from the manufacture of pearl barley from clean barley. This consists of the hulls and the outercoats of the kernels.

2.8 Barley Feed, Mixed — The entire residue from the milling of barley flour from clean barley, and is composed of barley hulls and barley middlings.

2.9 Barley Hulls — Outer covering of the barley grains.

2.10 Beet Molasses — A thick viscous by-product of the manufacture of beet sugar from sugar beets and shall contain 48 percent or more of total sugars, expressed as invert sugar. Dry matter shall be between 70 to 75 percent.

2.11 Beet Pulp — By-product of beet sugar industry which is fibrous in nature.

2.12 Blood Meal — Ground, dried blood.

2.13 Bone Ash — Ash obtained by burning bones with free access to air.

2.14 Bone Charcoal (Bone Black) — Product obtained by charring bones in closed retorts.

2.15 Bone Meal, Raw — Dried and ground meal obtained from undecomposed bones which have been cooked without steam pressure.

2.16 Bone Meal, Steamed — Product obtained from bones, dried and ground and sterilized by cooking undecomposed bones with steam under pressure.

2.17 Brewers' Grain, Dried — The dried, extracted residue of barley malt alone or in mixture with other cereal grain or grain products resulting from the manufacture of beer and may contain pulverized dried spent hops.

2.18 Brewers' Yeast, Dried — Dried non-fermentive, non-extracted yeast obtained as a by-product in the process of brewing beer. It shall contain not less than 40 percent protein.

2.19 Buttermilk, Dried — The product resulting from the removal of water from clean buttermilk.

2.20 Calcite — An acceptable source of calcium carbonate. It shall contain not less than 36 percent of calcium.

2.21 Cane Molasses — The thick, viscous by-product resulting during manufacture of cane sugar. It shall contain not less than 48 percent of total sugars, expressed as invert sugar. Dry matter shall be 70 to 80 percent.

2.22 Chuni-Dal — Product consisting of fine broken pieces of the endosperm, including germ and a portion of husks, as obtained in the preparation of *DAL* for human consumption.

2.23 Citrus Pulp, Dried — The ground peel, residue of the inside portions and occasional cull fruits of the citrus family which have been dried, producing a coarse, flaky product.

2.24 Coconut Oilcake — Residue which remains after removal of oil from dried coconuts kernels by a mechanical extraction process.

2.25 Coconut Oilcake, Solvent Extracted — The ground residue which remains after removal of most of the oil from dried meal of cocount by a solvent extraction process.

2.26 Complete Feed — A nutritionally adequate feed for animals by specific formula is compounded to be fed as the sole ration and is capable of maintaining life and/or promoting production without any additional substance being consumed except water.

2.27 Concentrate — A feed intended to be diluted with other feed ingredients to produce complete feed of optimum nutrient balance.

2.28 Cottonseed Hulls — Consists primarily of the outer covering of the cottonseed.

2.29 Cottonseed Oilcake, Decorticated — The product obtained by mechanical passing of clean cottonseed, composed principally of the kernel with such unavoidable portions of the hull and fibre as may be left in course of expression of oil.

2.30 Cottonseed Oilcake, Undecorticated — The product obtained by mechanical pressing of sound, mature, clean, delinted and unhulled cottonseed and from which most of the oil has been removed.

2.31 Cottonseed Oilcake, Solvent Extracted — The finely ground product which remains after removal of most of the oil by a solvent extraction process, from either cottonseed oilcake, decorticated or undecorticated or from cottonseed kernels after certain pre-processing.

2.32 Distillers' Grain, Dried — The dried residue obtained in the manufacture of alcohol and distilled liquors from maize or rye or wheat.

2.33 Distillers' Grain with Solubles, Dried — The distillers' dried grains which contain the major portion of the condensed screened stillage dried therewith. Only alcohol is distilled off when the whole mass is fermented.

2.34 Distillers' Solubles, Semi-Solid — The product obtained in the manufacture of alcohol and distilled liquors from grain or molasses by condensing to a syrupy consistency, the screened stillage obtained therefrom. When the source is indicated it shall correspond thereto.

2.35 Fat, Animal — Fat rendered or extracted from tissues of mammals and/or poultry.

2.36 Feather Meal — Product resulting from the treatment under pressure of clean, undecomposed feathers from slaughtered poultry, free of additives, and/or accelerators. Not less than 75 percent of the crude protein content shall be digestible.

2.37 Fish Meal — Product obtained by cooking clean, dried, undecomposed whole fish or fish cuttings, either or both, with or without extraction of part of the oil.

2.38 Fish Oil — Oil obtained from rendering whole fish or cannery waste fish.

2.39 Fish Scrap — Consists of the skeletal remains of fish which have been gutted, filleted and includes the head, the entire fish skeleton and its adhering proteinaceous tissues.

2.40 Fish Solubles — Product obtained during the production of fish meal, by concentrating the 'stickwater' or clarified liquor, which consists of 95 percent water and 5 percent solids. The solid portion consists of dissolved, dispersed and finely suspended fish proteins, minerals, B complex vitamins, and unknown growth factors.

2.41 Flax Seed, Ground — The product obtained by grinding commercially pure flax seed.

2.42 Grain Screenings — Small imperfect grains, weed seeds and other foreign materials having feeding value, that are separated in cleaning grain by a screen.

2.43 Groundnut Oilcake — The product after the mechanical extraction of oil from decorticated groundnut kernels.

2.44 Groundnut Oilcake, Solvent Extracted — A finely ground product obtained after extraction of most of the oil by solvent extraction process from groundnut oilcake or from hulled, clean groundnut kernels.

2.45 Groundnut Skins — The outer skin covering of the groundnut kernel, exclusive of hulls. It may contain broken groundnut kernels.

2.46 Guar Meal — A by-product obtained during the manufacture of guar gum, by removal of most of the endosperm from whole guar beans.

2.47 Hatchery By-Product (Poultry) — A mixture of egg shells, infertile and unhatched eggs, and culled chicks which have been cooked, dried and ground, with or without removal of part of the fat.

2.48 Hominy Feed — Mixture of the maize bran, germ and starchy part of maize as produced in the manufacture of pearl hominy, hominy grit or table meal.

2.49 Husks — Outer covering of kernels/seeds.

2.50 Limestone Dolomitic — A fairly satisfactory source of calcium supplement.

2.51 Limestone, Ground — An acceptable source of calcium carbonate. It shall contain not less than 36 percent calcium.

2.52 Linseed Oilcake — The residual product obtained after extraction of oil by mechanical means from commercially pure linseed.

2.53 Linseed Oilcake, Solvent Extracted — A finely ground product obtained after extraction linseed cake, chips, or flakes.

2.54 Liver Meal — Product obtained by drying and grinding liver from slaughtered animals.

2.55 Liver Meal, Glandular — Products obtained by drying and grinding liver and other glandular tissues from slaughtered animals. At least 50 percent of the dry mass of the product must be derived from liver.

2.56 Maize Bran — The outer coating of the maize kernel, with little or none of the starchy part of the germ.

2.57 Maize Feed, Meal — The fine siftings obtained after screening, cracked maize with or without its aspiration products added.

2.58 Maize Germ (Meal) — The residual product after solvent extraction of oil from maize germ cake as separated in the wet milling process of manufacture of maize starch, maize syrup and other maize products.

2.59 Maize Germ, Cake — Consists of maize germs with other parts of maize kernel from which part of the oil has been processed, and is the product obtained in the dry milling process of manufacture of maize meal, maize grits, hominy feed and other maize products.

2.60 Maize Gluten, Feed — That part of commercial shelled maize that remains after the extraction of the larger part of the starch and germ by the process employed in the wet milling process of manufacture of maize starch or syrup. It may or may not contain either maize extractives or maize germ meal.

2.61 Maize Gluten, Meal — That part of commercial shelled maize that remains after the extraction of the larger part of the starch and germ, and the separation of the bran by the processes employed in the wet milling process of manufacture of maize starch or syrup. It may or may not contain either maize solubles or maize oilcake. Crude protein content shall be above 40 percent.

2.62 Maize Grit or Hominy Grit — The medium sized hard flinty portion of ground maize containing little or none of the bran or germ.

2.63 Maize Oilcake — Maize germ cake.

2.64 Malt Sprouts — The product obtained by the removal of sprouts from malted barley together with the malt hulls, other parts of malt and foreign material. Sprouts derived from any other cereal shall be designated by the name of that cereal, for example, rye malt sprouts.

2.65 Meat-cum-Bone, Meal — Dry rendered product from mammal tissues, exclusive of hair, hoof, horn, hide trimmings, manure and stomach contents, except in such amounts as may occur unavoidably in good factory practice. It shall contain phosphorus not less than 4.5 percent. It shall not contain more than 14 percent pepsin indigestible residues. The crude protein shall be not less than 40 percent. It shall not contain added blood meal.

2.66 Meat Meal — The dry rendered product from mammal tissues exclusive of hair, bones, hoof, horn, hide trimmings, manure and stomach contents, except in such amounts as may occur unavoidably in good factory practice. It shall not contain less than 60 percent crude protein out of which not more than 11 percent shall be pepsin indigestible. It shall not contain added blood meal.

2.67 Milk Skimmed, Dried — The product resulting from drying of clean skimmed milk.

2.68 Mustard Oilcake — Residual product after mechanical extraction of oil from whole mustard and rape seeds.

2.69 Mustard Oilcake, Solvent Extracted — The product obtained by grinding the cake which remains after removal of some of the oil by mechanical extraction, and removing most of the remaining oil by solvent extraction.

2.70 Oat Groats (Hulled Oats) — Cleaned oats with hulls removed.

2.71 Oat Hulls — Consists primarily of the outer coverings of oats, obtained in the milling of table cereals or in the groating of oats from clean oats.

2.72 Oat Meal or Rolled Oats Feed — Obtained in the manufacture of rolled oat groats or rolled oats and consists of broken rolled oat groats, oat groat clips, and floury portions of oat groats, with only such quantity of finely ground oat hulls as is unavoidable in the usual process of commercial milling. It shall not contain more than 4 percent crude fibre.

2.73 Oyster Shell, Flour — An acceptable source of calcium carbonate. It shall not contain less than 36 percent calcium.

2.74 Phosphate Deflourinated — Includes either calcined, fused or precipitated calcium phosphate. It shall contain not more than one

part of fluorine to 100 parts of phosphorus. The minimum percent as calcium and phosphorus and maximum percent of fluorine shall be stated on the label.

2.75 Poultry Manure, Meal — Dehydrated, sterilized and ground poultry manure, free of other foreign materials. It shall not contain less than 4 percent nutrients as additives.

2.76 Premix — A uniform mixture of one or more nutrients and additives diluent and/or carrier. Premixes are used to facilitate uniform dispersion of the nutrients and additives in a large mix.

2.77 Ration — The amount of the total feed which is provided to one animal over a 24 hour period.

2.78 Rice Bran — The pericarp or bran layer and germ of rice, with only such quantity of hull fragments and chipped or broken rice as is unavoidable in the regular milling of edible rice.

2.79 Rice Bran, Solvent Extracted — Product obtained by removing oil from rice bran by the solvent extraction process.

2.80 Rice Chipped (Broken Rice) — Small fragments of rice kernels that have been separated from the larger kernels of milled rice.

2.81 Rice Polish — Finely powdered material obtained in polishing rice kernels, after the hulls and bran have been removed.

2.82 Safflower Oilcake — Residue obtained after extracting the oil from whole safflower seed by mechanical extraction process.

2.83 Safflower Oilcake, Solvent Extracted — Ground residue obtained after extracting the oil from whole safflower seed or safflower oilcake by a solvent extraction process.

2.84 Sal Seed Oilcake, Solvent Extracted — The product obtained by extracting of oil from decorticated and flaked or pelletized sal seed kernels, by the solvent extraction process.

2.85 Salt, Iodized — It is a common salt containing iodine between 10 to 15 parts per million, uniformly distributed.

2.86 Shrimp (Prawn) Meal — Undecomposed ground dried waste of shrimps (prawns) and contains parts and/or whole shrimp (prawns).

2.87 Silk Worm Pupae, Dried — The product comprising dried pupae obtained by boiling cocoons after reeling; removing other chitinous covering and washing.

2.88 Soyabean Oilcake — The residue product obtained after mechanical extraction of oil from soyabeans decorticated or undecorticated.

2.89 Soyabean Oilcake, Solvent Extracted — A product obtained after the extraction of most of the oil by the process of solvent extraction from soyabean oilcake or from soyabeans, decorticated or undecorticated.

2.90 Tapioca Chips — Dried thin sliced pieces of tapioca tubers.

2.91 Tapioca Flour — The product obtained by grinding dried tapioca chips/tubers.

2.92 Tapioca Pulp, Spent — By-product obtained after starch has been extracted from tapioca tubers/chips.

2.93 Tomato, Pomace, Dried — A dried mixture of tomato skins, pulp, and crushed seeds.

2.94 Torula, Yeast, Dried — Is the dried, non-fermentative yeast of the botanical classification *Torulops* which has been separated from the medium in which propagated. It shall not contain less than 40 percent crude protein.

2.95 Urea — Is predominantly urea but may contain other non-toxic nitrogen compounds which are present as by-products from the commercial synthesis and processing of urea.

2.96 Wheat Bran — The coarse outer covering of the wheat kernel as separated from the cleaned and scoured wheat in the usual process of commercial milling.

2.97 Wheat Germ Meal — Consists chiefly of wheat germ together with some bran and middlings of shorts. It shall contain not less than 25 percent crude protein.

2.98 Wheat Middlings — Consists of fine particles of wheat bran, wheat shorts, wheat germ, wheat flour and some of the offal from the 'tail of the mill'. Wheat middlings may be either coarse or fine.

2.99 Wheat Shorts — Consists of fine particles of wheat bran, wheat germ, wheat flour and the offal from the 'tail of the mill'.

2.100 Whey, Dried — The dried by-product from the manufacture of cheese or casein.

2.101 Yeast Irridiated, Dried — Dried non-fermentative yeast which has been subjected to ultra-violet rays in order to produce anti-rachitic potency.